

REMARKS

By this amendment, Claims 11, 13-17, and 26-32 have been amended, Claims 1-10, 12, and 18-25 have been cancelled, and Claims 33-56 have been added. Hence, Claims 11, 13-17, and 26-56 are currently pending in the application.

INTERVIEW SUMMARY

The Applicants thank the Examiner for the telephone Interview conducted on February 9, 2006. The interview was between Examiner Wen Tai Lin and the Applicants' Attorney, Christopher J. Brokaw. Pending Claim 1 that was rejected in the Office Action was discussed along with reference to U.S. Patent Number 6,622,170 issued to Harrison et al. ("*Harrison*"). No agreement was reached.

FILED IDS STATEMENTS HAVE NOT BEEN ACKNOWLEDGED

Applicants have filed an information disclose statement on May 23, 2005 and on June 7, 2004 (the "unacknowledged IDSs"). However, the Applicants have not yet received an initiated PTO-form 1449 indicating receipt and consideration of the unacknowledged IDSs. Consequently, Applicants respectfully request receipt of an initiated PTO-form 1449 indicating receipt and consideration of the "unacknowledged IDSs."

SUMMARY OF THE REJECTIONS

Claim 9 has been rejected under 35 U.S.C. § 102(e) as allegedly being anticipated over U.S. Patent Number 6,581,093 issued to Verma. ("*Verma*").

Claims 1-8 and 11-32 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over *Harrison* in view of U.S. Patent Number 6,263,367 issued to Chu et al. ("*Chu*").

The rejections are respectfully traversed.

EACH PENDING CLAIM IS PATENTABLE OVER THE PRIOR ART

Even if the cited art were to be properly combined, the combination of references would still fail to disclose, teach, or suggest at least one feature recited in each pending claims.

A. CLAIMS 26 AND 27

Claim 27 features:

“receiving a validity period value of one of a plurality of directory information trees that are created and stored in the directory service in association with a directory information tree manager, wherein the validity period value stores information that defines a time period in which a sub-tree of a directory information tree, associated with the validity period value, is valid, and wherein a valid sub-tree cannot be updated or modified;

when quality of service policy management information is needed, determining which one of the directory information trees is a currently active directory information tree;

in response to receiving a request to update policy management information stored in the currently active directory information tree, updating a particular sub-tree of the currently active directory information tree, when the particular sub-tree is not valid, without copying contents of the currently active directory information tree into another directory information tree; and

retrieving the quality of service policy management information from a sub-tree of the currently active directory information tree only during the time period within the validity period value thereof” (emphasis added)

Claim 26 features:

“means for receiving a validity period value of one of a plurality of directory information trees that are created and stored in the directory service in association with a directory information tree manager, wherein the validity period value stores information that defines a time period in which a sub-tree of a directory information tree, associated with the validity period value, is valid, and wherein a valid sub-tree cannot be updated or modified;

means for determining, when quality of service policy management information is needed, which one of the directory information trees is a currently active directory information tree;

means for updating a particular sub-tree of the currently active directory information tree, when the particular sub-tree is not valid, without copying contents of the currently active directory information tree into another directory information tree in response to receiving a request to update policy management information stored in the currently active directory information tree; and

means for retrieving the quality of service policy management information from a sub-tree of the currently active directory information tree only during the time period within the validity period value thereof” (emphasis added)

At least the above-underlined elements are not disclosed, taught, or suggested by the cited art.

Harrison teaches an approach for storing policy configuration information using a LDAP server. Under the approach of *Harrison*, when a LDAP client wishes to update policy configuration information, a new tree is created by cloning the current tree or a previous tree by building a new tree. When the LDAP client is finished updating the new tree, the path for using LDAP clients is set to the new tree and the clients are requested to read LDAP policy configuration information using the new path. If the new tree of policy configuration information is found to be unsuitable, the client's path is reset to the original tree and the clients are requested to read LDAP information policies using the reset path (See Abstract; Col. 6, lines 4-25).

In sharp contrast, Claim 27 describes an approach that provides for writing only the modified objects when updating a directory information tree. For example, page 16, lines 14-24 of the Applicants' specification states:

Also in the preferred embodiment, policy information objects are updated only selectively in response to a policy change. Specifically, in one approach, every policy deployment operation ("Job") results in the creation of a new DIT, which is fully written back into the directory server, thereby duplicating unchanged objects. In contrast, in the preferred embodiment, only modified objects are rewritten. Parts of the tree that may be written back (if they were modified) are called "rewritten DIT units" or RDUs. The following are RDUs: Role (policy group), Role (for devices), Service Template, reusable objects in the Reusable Objects Repository, PDP. For example, if any object in a policy Role object is modified, the Role sub-tree is written back to the directory server. This occurs even if the modified object is referenced by an object in the sub-tree and is actually in the repository that is used by the Role and not in the same DIT sub-tree. (emphasis added).

In view of the fundamental distinctions between *Harrison* and the features of the above-quoted claims, numerous features of each claim are not disclosed, taught, or suggested by *Harrison*. For example, Claim 27 recites the element of:

in response to receiving a request to update policy management information stored in the currently active directory information tree, updating a particular sub-tree of the currently active directory information tree, when the particular sub-tree is not valid, without copying contents of

the currently active directory information tree into another directory information tree (emphasis added).

As shown above, *Harrison* expressly teaches away from this feature. For example, Col. 6, lines 8-11 states that a “key concept” of the approach of *Harrison* is that whenever directory information is updated, a new directory tree of information is created. In sharp contrast, the above-quoted element features updating a particular sub-tree of a currently activity directory information tree without copying contents of the currently active directory information tree into another directory information tree. Consequently, *Harrison* cannot possibly disclose, teach, or suggest this feature.

Further, *Chu* also fails to teach or suggest this element. *Chu* is directed towards an approach for determining whether to sever a connection between a client and a server. In *Chu*, a client refresh period is communicated from the server to the client. If the client does not communicate with the server in the period of time indicated by the client refresh period, then the server may sever the connection with that client. As a result, *Chu* lacks any teaching or suggestion of the above-quoted feature.

Moreover, Claim 27 recites:

receiving a validity period value of one of a plurality of directory information trees that are created and stored in the directory service in association with a directory information tree manager, wherein the validity period value stores information that defines a time period in which a sub-tree of a directory information tree, associated with the validity period value, is valid, and wherein a valid sub-tree cannot be updated or modified;

The Office Action acknowledges that “*Harrison* does not specifically teach that each active directory information tree is assign a validity period value during which the information tree cannot be updated or modified,” and instead, relies upon *Chu* to show this feature. However, the portion of *Chu* cited to show this feature (Abstract. Col. 2, lines 11-28) merely discusses an approach for a server determining whether to sever a connection between a client and a server by sending a message indicating an interval of time to a client, and if the client does not respond within the interval of time, the server severs a connection with the client. This teaching in no way suggests or is analogous to a validity period value as claimed. For example, a validity period value stores information that defines a time period in which a sub-

tree of a directory information tree, associated with the validity period value, cannot be updated or modified. In sharp contrast, nothing about the client refresh period of *Chu* indicates a time period of when a sub-tree of a directory information tree cannot be updated or modified. The concepts are orthogonal. Consequently, *Chu* cannot disclose, teach, or suggest this element.

As one or more elements of Claim 27 are not disclosed, taught, or suggested by *Harrison* or *Chu* individually, it is respectfully submitted that the combination of *Harrison* and *Chu* would also fail to disclose, teach, or suggest at least one element of Claim 27. Consequently, Claim 27 patentable over *Harrison* and *Chu*, either individually or in combination, and Claim 27 is in condition for allowance.

As Claim 26 features elements similar to those of Claim 27, it is respectfully submitted that, for at least the reasons given above with respect to Claim 27, Claim 26 is also patentable over *Harrison* and *Chu*, either taken individually or in combination, and is in condition for allowance.

B. Claims 11 and 51

Independent Claim 11 has been amended herein to (a) be recited in apparatus form, and (b) clarify that the validity period value stores information that defines a time period in which a sub-tree of a directory information tree, associated with the validity period value, is valid (see page 18, lines 11-13 of the Applicants' specification).

Independent Claim 11 features:

“receiving a validity period value of one of a plurality of directory information trees that are created and stored in the directory service in association with a directory information tree manager, wherein the validity period value stores information that defines a time period in which a sub-tree of a directory information tree, associated with the validity period value, is valid, and wherein a valid sub-tree cannot be updated or modified;

providing, in the directory information tree manager, an active directory information tree value that references a currently active directory information tree, and an old directory information tree value that references a formerly active directory information tree;

when quality of service policy management information is needed, determining which one of the directory information trees is a currently active directory information tree as indicated by the active directory

information tree value of the directory information tree manager; and retrieving the quality of service policy management information from a sub-tree of the currently active directory information tree only during the time period within the validity period value thereof." (emphasis added).

Claim 11 has been rejected solely on the basis that:

As to claims 11-27 and 29-32, since the features of these claims can also be found in claims 1-8, they are rejected for the same reasons set forth in the rejection of claims 1-8 above. (Office Action, page 7)

However, the Office Action acknowledges that *Harrison* does not teach or suggest a validity period value as claimed. Further, as explained above with reference to Claim 1, *Chu* also cannot disclose, teach, or suggest a validity period value as claimed. Consequently, *Harrison* and *Chu*, individually or in combination, cannot disclose, teach, or suggest at least the above-underlined elements of Claim 11. Consequently, it is respectfully submitted that Claim 11 is patentable over *Harrison* and *Chu*, either individually or in combination, and is patentable over the cited art.

New Claim 51 contains features similar to those recited in Claim 11. Consequently, it is respectfully submitted that Claim 51 is patentable over the cited art, and is in condition for allowance, for at least the reasons given above with respect to Claim 11.

C. Claims 17 and 56

Independent Claim 17 has been amended herein to (a) be recited in apparatus form, and (b) clarify that the validity period value stores information that defines a time period in which a sub-tree of a directory information tree, associated with the validity period value, is valid.

Independent Claim 17 features:

An apparatus of retrieving and storing quality of service policy management information using a directory service, comprising:
a processor;
a network interface coupled to a managed network that receives network data from one or more network devices that are in the managed network;
one or more sequences of stored instructions accessible to the processor and which, when executed by the processor, cause the processor to carry out the steps of:
creating and storing a plurality of directory information trees that are created and stored in the directory service in association with a

directory information tree manager;
when quality of service policy management information is needed,
determining which one of the directory information trees is a
currently active directory information tree;
receiving a validity period value of the directory information tree
manager, wherein the validity period value stores information
that defines a time period in which a sub-tree of the currently
active directory information tree is valid, and wherein a valid
sub-tree cannot be updated or modified;
if the validity period value of the directory information tree manager is
currently valid, then performing the steps of:
receiving a name value and a validity period value of a currently
active directory information tree; and
retrieving quality of service policy information from a sub-tree
of the active directory information tree only during the
time period indicated by the validity period value for the
sub-tree.” (emphasis added).

Claim 17 has been rejected solely on the basis that:

As to claims 11-27 and 29-32, since the features of these claims can also be found in claims 1-8, they are rejected for the same reasons set forth in the rejection of claims 1-8 above. (Office Action, page 7)

However, the Office Action acknowledges that *Harrison* does not teach or suggest a validity period value as claimed. Further, as explained above with reference to Claim 1, *Chu* also cannot disclose, teach, or suggest a validity period value as claimed. Consequently, *Harrison* and *Chu*, individually or in combination, cannot disclose, teach, or suggest at least the above-underlined elements of Claim 17. Consequently, it is respectfully submitted that Claim 17 is patentable over *Harrison* and *Chu*, either individually or in combination, and is patentable over the cited art.

New Claim 56 contains features similar to those recited in Claim 17. Consequently, it is respectfully submitted that Claim 56 patentable over the cited art, and is in condition for allowance, for at least the reasons given above with respect to Claim 17.

D. Claims 29 and 48

Independent Claim 29 has been amended herein to be recited in apparatus form. The subject matter recited in Independent Claim 29 differs considerably from the subject recited in Claim 1. For example, Claim 29 recites:

“testing a validity designation value after carrying out a read operation,
wherein the validity designation value is associated with one of a plurality of
directory information trees that are created and stored in a directory
service in association with a directory information tree manager, and
wherein the plurality of directory information trees are associated with quality
of service policy information; and
verifying the validity of information that has been read during the read
operation by determining whether the validity designation value is
currently null.” (emphasis added)

The above-quoted elements are not disclosed, taught, or suggested by the cited art.

In rejecting Claim 29, the Office Action stated:

As to claims 11-27 and 29-32, since the features of these claims can also be found in claims 1-8, they are rejected for the same reasons set forth in the rejection of claims 1-8 above. (Office Action, page 7).

This is incorrect. The elements recited in Claim 29 are not featured in any of Claims 1-4, 6-8, and 28. Thus, there are currently no substantive arguments on the record against the patentability of Claim 29.

The Applicants have repeatedly brought this fact to the attention of the Office, and to date no explanation has been provided as to why Claim 29 is not allowable over the cited art. To illustrate, the Applicants added Claim 29 in their first response of January 22, 2004. However, the second, third, fourth, and fifth Office Actions (mailed July 6, 2004, January 6, 2005, June 6, 2005, and November 14, 2005), failed to provide any explanation as to why the above-underlined elements of Claim 29 are taught or suggested by the prior art, even though the Applicants have requested Claim 29 be properly examined in each and every response since Claim 29 was added.

Numerous, fundamental differences exist between the cited art and the pending claims. In particular, Claim 29 recites the elements of “testing a validity designation value after carrying out a read operation,” and “verifying the validity of information that has been read during the read operation by determining whether the validity designation value is currently null.” No portion of *Harrison* or *Chu* perform these steps. No portion of *Harrison* or *Chu* is cited to show these steps.

The burden is on the USPTO to either (a) allow the claims, or (b) provide an explanation as to why a claim is not new or non-obvious in view of the prior art. See 35 U.S.C. § 102, preamble.

Applicants have already identified, in their prior response, several elements of Claim 29 that are not disclosed, taught, or suggested by the prior art. Currently, Claim 29 has been rejected four times without an explanation as to why the prior art teaches or suggests Claim 29. Consequently, Applicants respectfully request Claim 29 be allowed, or an explanation be provided as to why the elements of Claim 29 are not patentable over the cited art.

New Claim 48 contains features similar to those recited in Claim 29. Consequently, it is respectfully submitted that Claim 48 is patentable over the cited art, and is in condition for allowance, for at least the reasons given above with respect to Claim 29.

E. Claim 32

Independent Claim 32 features:

“a machine readable medium carrying at least :

- a plurality of directory information trees associated with quality of service policy information, each directory information tree includes at least a policy sub-tree that has at least one or more role objects, one or more service template objects, and one or more policy decision point objects, wherein the one or more role objects, one or more service template objects, and one or more policy decision point objects are related to the quality of service information; and

- one or more sequences of stored instructions accessible to the processor and which, when executed by a processor, cause the processor to carry out the step of:

- determining that one or more objects in one of the directory information trees has been modified by a process and rewriting to the directory service only such objects, service template objects, and policy decision point objects as have been modified by the process.” (emphasis added)

The above-quoted elements are not disclosed, taught, or suggested by the cited art.

In rejecting Claim 32, the Office Action stated:

As to claims 11-27 and 29-32, since the features of these claims can also be found in claims 1-8, they are rejected for the same reasons set forth in the rejection of claims 1-8 above. (Office Action, page 7).

This is incorrect. The elements recited in Claim 32 are not featured in any of Claims 1-4, 6-8, and 28. Thus, there are currently no substantive arguments on the record against the patentability of Claim 32.

The Applicants have repeatedly brought this fact to the attention of the Office, and to date no explanation has been provided as to why Claim 32 is not allowable over the cited art. To illustrate, the Applicants added Claim 32 in their response of January 22, 2004. However, the second, third, fourth, and fifth Office Actions (mailed July 6, 2004, January 6, 2005, June 6, 2005, and November 14, 2005), failed to provide any explanation as to why the above-underlined elements of Claim 32 are taught or suggested by the prior art, even though the Applicants have requested Claim 32 be properly examined in each response since Claim 32 was added.

Numerous, fundamental differences exist between the cited art and the pending claims. In particular, Claim 32 recites the element of “determining that one or more objects in one of the directory information trees has been modified by a process and rewriting to the directory service only such objects, service template objects, and policy decision point objects as have been modified by the process.” No portion of *Harrison* or *Chu* perform these steps. No portion of *Harrison* or *Chu* is cited to show these steps.

The burden is on the USPTO to either (a) allow the claims, or (b) provide an explanation as to why a claim is not new or non-obvious in view of the prior art. See 35 U.S.C. § 102, preamble.

Applicants have already identified, in their prior response, features of Claim 32 that are not disclosed, taught, or suggested by the prior art. Currently, Claim 32 has been rejected four times without an explanation as to why the prior art teaches or suggests Claim 32. Consequently, Applicants respectfully request Claim 32 be allowed, or an explanation be provided as to why the elements of Claim 32 are not patentable over the cited art.

F. Dependent Claims 13-16, 28, 30-31, 33-47, 49-50, and 52-55

Claims 13-16, 28, 30-31, 33-47, 49-50, and 52-55 are dependent claims, each of which depends (directly or indirectly) on one of the claims discussed above. Each of Claims 13-16, 28, 30-31, 33-47, 49-50, and 52-55 is therefore allowable for the reasons given above for the

claim on which it depends. In addition, each of Claims 13-16, 28, 30-31, 33-47, 49-50, and 52-55 introduces one or more additional limitations that independently render it patentable. However, due to the fundamental differences already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims.

CONCLUSION

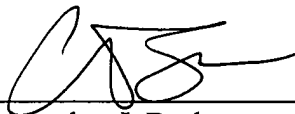
For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any fee shortages or credit any overages to Deposit Account No. 50-1302.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP



Christopher J. Brokaw

Reg. No. 45,620

Date: February 14, 2005

2055 Gateway Place, Suite 550
San Jose, California 95110-1089
Telephone: (408) 414-1080 ext. 225
Facsimile: (408) 414-1076